NOAA Ship OSCAR DYSON

Cruise OD-08-01 Metadata

ECHO INTEGRATION-TRAWL SURVEY OF WALLEYE POLLOCK IN THE SHUMAGIN ISLANDS AND SANAK TROUGH

06 February - 15 February 2008 (GMT)

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Directory Structure of the OD-08-01 Cruise Data DVD:

- CTD (Sea-Bird) Data contains Sea-Bird software data files for the Three Saints Bay calibration CTD
- Data Documentation contains Seabird and Furuno sea temperature calibration information, and several files which document known sensor problems.
 - o 2008 Seabird Instrument Calibrations folder contains scans of maintenance and calibration paperwork for Seabird instruments used on the cruise.
 - Furuno (SeaTemp) Calibration Data folder contains data used in the calibration of the Furuno through-hull sea temperature sensors. Note: regression coefficients used in sensor.scf files during this cruise are from comparisons with SBE39, S/N 1396 only. All data from Seattle (warm water) and Three Saints Bay (cold water), and both SBE39s (S/N 1396 and S/N 1438), can be combined to generate more comprehensive regression coefficients. New coefficients can be applied to the raw Furuno sea temperature data (sensors: High-SeaTemp-C, Mid-SeaTemp-C, and Low-SeaTemp-C). Time constraints and unknown criteria did not allow for this to be done at-sea. Contact SST Kathy Hough if future, cold water, calibration data is desired for refinement of regression coefficients.
 - Derived Sensor Problem.doc describes a SCS programming bug that adversely affects all "derived" sensor raw data files, and EventData files that utilize derived sensor values. *February 15, 2008, 1215 GMT* it was just discovered that when instruments are turned off, the last written raw data values for <u>non</u>-derived sensors also continue to write to EventData files. See TSG-SNAP edited.elg and TSG-OBS ###.elg EventData files for an example.
 - O Draft Mark ABL Corrections.pdf contains corrections to draft mark heights above baseline.
 - Metadata.doc this file.
 - MOA Snaps edited.elg comprehensive (files 1, 2, 3), edited file (see below for comments).
 - Observed Sensor Problems.doc contains time periods and images depicting known data errors
 - Sensor Comments.xls copy of the .scf file used from the beginning of transects to the end of the cruise. Testing required enabling many sensors which were found to be faulty or in error. This file describes the validity of each sensor, and thus each sub-directory/file in the "SCS Data" directory.
 - o TSG-SNAP edited.elg comprehensive (files 1 and 2), edited file (see below for comments).
 - Wxlogs_06-13Feb08.pdf scans of Deck Weather Observation sheets. Observations are in Local Time (AST).

• SCS Data – contains

- o All raw sensor data in individual folders (GPSMX420, POSMV, TSG, Fluorometer, etc.).
- EventData folder (contains separate folders for all Events run during the cruise). Note: Use
 * edited* file versions if they exist; they contain edits made and are comprehensive.
 - OD0801 the event run on the bridge (contains MOA Snap and MOA Continuous files). All transect and trawl data was collected by the scientific party; thus, there are no "Start Transect", "EQ", etc. data lines in the OD0801 MOA Snap.
 - NavMetOce backup 5-second continuous data for the OD0801 event (same variable format). This data, along with the MOA Continuous files, can be used to add or replace any OD0801 event data line (i.e. Doppler ON/OFF, Sunrise/Sunset, etc.) in the MOA Snap files.

Variable format for OD0801 and NavMetOce Events:

Date, Time, Button, Notes, MX420-Time, MX420-Lat, MX420-Lon, MX420-COG, MX420-SOG, Gyro, EK60-Depth-m, AirTemp, Rel Humidity, TrueWind-RAW-Direction, TrueWind-RAW-Speed, BaroPressure, High-SeaTemp-C, Mid-SeaTemp-C, Low-SeaTemp-C, Shaft-RPM-Value, CenterBoard-Pos, TSG-SBE38-Temp, TSG-SBE45-Temp, TSG-SBE45-Cond, TSG-SBE45-Sal, TSG-SBE45-SVel, Fluorometer-Val, Fluorometer-Count

Note: Raw sea temperature data exist in the above event data vs. calibrated data.

- TrawlEvent contains all Trawl files. Known to contain more sets of files (13) than hauls. Not edited by NOAA Ship OSCAR DYSON personnel.
- TSG event run in the Chemlab. See "TSG-SNAP_edited.elg" and "Observed Sensor Problems.doc" files for scientific seawater system outages.
- NODC, SAMOS, and TsgTransmitter unrelated projects to the cruise, but folders contain potentially useful files.

EventData Editing Notes:

o OD0801 EventData

- DOPPLER ON/OFF lines: The Doppler was turned on and off, typically when approaching and leaving shallow areas. Doppler ON and OFF buttons were incorporated into the OD0801 bridge event; however, review of the MOA Snap data revealed missing Doppler ON/OFF lines. It is not possible to compile the raw SCS Doppler data to extract or verify every ON/OFF time while at-sea due to time and software constraints. Raw Doppler, Speed over Ground (i.e. >= 10 knots), and Centerboard position data contained within SCS data can be used in combination to determine desirable time periods to include in EK60 data analyses.
- CB Retracted and Lowered lines can be verified with CenterBoard-RAW* data.
- Sunrise and Sunset times have been edited if Notes were made by bridge personnel.
 Missing Sunrise and Sunset times can be found by filling out Form B at http://aa.usno.navy.mil/data/docs/RS OneDay.php
- o TSG EventData The Snap files have been completely edited see TSG-SNAP edited.elg.

ALL data, except Deck Weather Observations, are in GMT/UTC unless otherwise noted.

Begin drafts levels need to be confirmed, and end drafts will be obtained after the Cruise Data Package is compiled. They will be e-mailed to Alex de Robertis at a later date.

OD0801 Trackline



